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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/931,073

08/15/2001

Goran Mork

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01/11/2006

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EXAMINER

PHAN, HANH

ART UNIT

PAPER NUMBER

2638

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,073

Applicant(s)

MORK ET AL.

Examiner

Hanh Phan

Art Unit

2638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 10/24/2005.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 5-12, 16-23 and 27-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Shigeta et al (US Patent No. 6,616,352).

Regarding claims 1, 12 and 23, referring to Figure 5, Shigeta teaches in an optical communication transmitter system (i.e., optical transmission apparatus 70, Fig. 5), a method for superimposing utility data (i.e., auxiliary signal, Fig. 5) on an optical signal, the method comprising:

receiving utility data (i.e., auxiliary signal, Fig. 5, col. 6, lines 1-31) from a utility data source (i.e., auxiliary signal generating section 20, Fig. 5);

spreading (i.e., spreading modulator 22 and pseudonoise generating section 21, Fig. 5, col. 6, lines 1-31) the utility data according to a spreading code to generate a spread spectrum signal; and

modulating (i.e., laser drive circuit 25, laser diode 26 and multiplexing section 24, Fig. 5) the optical signal with a combination of the spread spectrum signal and a signal carrying payload data (i.e., main signal input section 23, Fig. 5, col. 6, lines 1-31).

Regarding claims 3, Shigeta further teaches wherein modulating comprises : adding the spreading spectrum signal to the payload data signal to form a modulation signal and driving a laser using the modulation signal so that the laser outputs the optical signal modulated with both the payload data and the utility data (col. 6, lines 1-31).

Regarding claims 5, 6, 10, 11, 16, 17, 21, 22, 27, 28, 32 and 33, Shigeta further teaches the utility data comprises a signal strength indication or firmware (col. 6, lines 1-31).

Regarding claims 7, 9, 18, 20, 29 and 31, Shigeta further teaches outputting a modulated optical signal wherein modulation due to the payload data and modulation due to the utility data overlap spectrally (col. 6, lines 1-31).

Regarding claims 8, 19 and 30, referring to Figures 5 and 6, Shigeta teaches an optical communication receiver, a method for recovering utility data from an optical signal, the method comprising:

accepting as input an optical signal modulated with payload data and the utility data (col. 6, lines 1-64);

multiplying an electrical signal derived from the optical signal by a spreading sequence to recover the utility data, the electrical signal carrying both the payload data and the utility data (col. 6, lines 60-67 and col. 7, lines 1-34); and

recovering the payload data from the optical signal (col. 6, lines 1-67 and col. 7, lines 1-34).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 4, 13-15 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigeta et al (US Patent No. 6,616,352) in view of Kitajima et al (US Patent No. 5,515,196).

Regarding claims 2, 4, 13-15 and 24-26, Shigeta teaches all the aspects of the claimed invention except fails to specifically teach an external optical modulator. However, Kitajima in US Patent No. 5,515,196 teaches an external optical modulator (Figs. 1, 4, 6 and 13, col. 5, lines 26-49). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the external optical modulator as taught by Kitajima in the system of Shigeta. One of ordinary skill in the art would have been motivated to do this since Kitajima suggests in column 5, lines 26-49 that using such the external optical modulator has advantage of allowing reducing non-linear optical effects and increasing the transmission quality of the system.

Response to Arguments

6. Applicant's arguments with respect to claims 1-33 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571)272-3078. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.


HANH PHAN
PRIMARY EXAMINER